# Organization and Functional Features of a Multi-disciplinary Problem List in an Enterprise-wide Computer-based Patient Record

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abstract

### Introduction

A decision was made to support the beginning development and implementation of a true Computerbased Patient Record (CPR) as specified by the Institute of Medicine. They recommend a patien problem list for the CPR. Our vision is: "The patient problem list is a historical compilation of the physical, psychosocial, spiritual, and cultural problems that the Care Team uses to communicate and coordinate the clinical decision making and patient care processes. The problem list tracks the care process rationale over time." The problem list must be multidisplinary in nature and communicate all views and needs of the patient. The problem list is the organizer of the patient's overall plan of care. The problem list implementation team was co-chaired by a physician and a nurse. Stakeholders were identified and focus groups conducted to determine barriers and benefits of a computerized, multidisciplinary problem list. All clinical departments from the largest (nursing and medicine) to the smallest (pastoral care) were interviewed, as were administrative, medical records, and financial departments to determine needs and the impact of a problem list on their functions.

## Review of the Literature

The literature supports some basic hypotheses about the impact of a problem list in a patient record. Errors in medicine are often attributed to poor knowledge and communication concerning the patient's situation. Efforts to avoid errors improved the flow of patient information to the care provider. Re are reports that the quality of care is improved with a problem list. The reports are descriptive in nature, and the true effects on cost and quality are not reported. Nonetheless, some investigators have reported quantifiable results that support efforts to enhance the use of the problem list and the computerized record. The use of a computerized problem list has been shown to increase the richness and details of the description of patient's problems.

## Methods

Qualitative methods of evaluation are recommended for designing the system and identifying/understanding

users' needs. User focus groups were conducted. A few of the questions organizing the discussions were: What are the issues that are likely to create difficulties for using or maintaining the problem list in your work area? What would be an effective way to overcome these barriers? Where and when would the problem list help you do your job? How would you like the problem list presented or used in order to achieve those benefits? Who should be responsible for updating the problem list? How do we establish accountability when questions or differences of opinion occur? Extensive notes were made, transcribed, and analyzed for themes using constant comparative techniques. The criteria of trustworthiness were maintained through peer debriefing, member checks, memos concerning decisions about categories, and credibility/dependability audits.

#### Results

Six themes emerged as being critical to the success of the development and implementation of the problem list: 1) ownership and responsibility maintaining the accuracy and currency of the problem list concerned issues surrounding different disciplines adding and resolving problems of the list, consistent use of the list, and attitudes of concerning multidisciplinary collaboration; 2) development and maintenance of a standardized and coded clinical lexicon that would serve the needs of each discipline to reveal their contribution to patient care; 3) cost of purchasing and maintaining the computer terminals and the problem list database; 4) clinical workload and time involved in problem entry; 5) training and education of staff to use the problem list in an accurate and consistent manner; and 6) secondary report tools for research, discharge planning, and case finding.

## **Discussion**

These themes guided the team in developing Standards for Problem List Maintenance, Definitions of Problem Status, an Intranet Education Module, a Vocabulary and Coding Committee, and implementation strategies. They will also guide the implementation and evaluation of the multi-disciplinary problem list.